

ANGLED GRIPPING JOINT COMBINATION FOR SUPPORT STRUCTURES

CLAIMS

I claim:

29. An angled gripping joint combination for support structures, comprising a U-beam top joint with lumber end gripper and a U-beam splay bar for use with a pair of lumber legs and a lumber cross-beam, the U-beam top joint having a side U-beam and a side bracket beam joining a pair of spaced inward facing end brackets; each such spaced inward facing end bracket together with a portion of the side U-beam and a portion of the side bracket beam being adapted to abut three sides of a lumber leg while allowing a fourth side of the lumber leg free to pivot away from the bracket until pressing a top edge of the fourth side against the lumber cross-beam when the lumber cross-beam is positioned on the side beams, each such bracket having an inward facing lumber leg pivot surface that is at an obtuse angle with respect to a top surface of the side bracket beams, the U-beam splay bar having at each end thereof a spaced pair of outward facing end brackets, each having an outward facing lumber leg guiding surface that is fixed with respect to the bar at a like obtuse angle to that of an inward facing end bracket with respect to the top surface of the side bracket beams.

30. The angled gripping joint combination of Claim 29, in which there are side enclosing brackets affixed to the side beam of the U-beam top joint.

31. The angled gripping joint combination of Claim 29, in which there are side enclosing brackets affixed to a side of the U-beam splay bar.
32. The angled gripping joint combination of Claim 29, in which there are side enclosing brackets affixed to the side beam of the U-beam top joint and side enclosing brackets affixed to a side of the U-beam splay bar.
33. The angled gripping joint combination of Claim 32, in which the outward facing brackets each have a pair of parallel flanks, one flank each on opposite sides of and extending perpendicular to the outward facing lumber leg guiding surfaces.
34. The angled gripping joint combination of Claim 33, in which the parallel flanks have holes through which a retaining nail could be inserted into a lumber leg.
35. A sawhorse assembly including a pair of the gripping joint combination of Claim 34, a lumber cross-beam, and four lumber legs.
36. The combination of a pair of the sawhorse assemblies of Claim 35, in which two of the four top joints have a support ledge formed by a U-beam to which a chopsaw base can be bolted.
37. The sawhorse assembly of Claim 35, comprising four additional lumber legs, each additional lumber leg being longer than each of the four lumber legs.

38. A pair of the sawhorse assemblies of Claim 35, aligned width-wise and joined by lumber lengths inserted perpendicular to the lumber cross-beams through aligned side enclosing brackets on the respective sets.

39. A combination in which a multiplicity of the angled gripping joint combination of Claim 35, form a bench and table structure with lumber lengths inserted through side enclosing brackets affixed to side beams of U-beam top joints of at least one bench structure and inserted through side enclosing brackets affixed to sides of U-beam splay bars of at least one table structure aligned therewith.